



Complete Summary

TITLE

Immunizations: percentage of two-year-old patients who are on time with their primary series of immunizations (DTaP, IPV, MMR/MMRV, PCV7/PPV23, VZV, Hib, Hep B, Hep A, Rota, Influenza).

SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Immunizations. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2008 Oct. 64 p. [67 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of two-year-old patients who are on time with their primary series of immunizations (DTaP, IPV, MMR/MMRV, PCV7/PPV23, VZV, Hib, Hep B, Hep A, Rota, Influenza).

RATIONALE

The priority aim addressed by this measure is to increase the percentage of patients who are on time with recommended immunizations.

PRIMARY CLINICAL COMPONENT

Immunization; diphtheria, tetanus toxoids and acellular pertussis vaccine (DTaP); inactivated poliovirus (IPV); measles, mumps, rubella and varicella (MMR/MMRV);

pneumococcal 7 valent conjugated polysaccharide vaccine/pneumococcal 23 valent polysaccharide vaccine (PCV7/PPV23); varicella vaccine (VZV); *Haemophilus influenza* type b conjugate vaccine (Hib); hepatitis B vaccine (Hep B); hepatitis A vaccine (Hep A); Rotavirus vaccine (Rota); Influenza vaccine

DENOMINATOR DESCRIPTION

Number of children in the medical group's practice reaching the age of two years within the reporting month (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Number of children in the denominator who are on time with their primary series of immunizations (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Immunizations.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Age 2 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Children who reach their second birthday during the specified time period

Select a random sample of the eligible population for data collection. The suggested sample size for each medical group is at least 10 each month. If the medical group identifies a total of fewer than 10 children, then all identified children are to be included.

The medical record of each child is reviewed to determine if each of the required immunizations is documented. A child should be considered on time with the immunization if and only a date and type of vaccination are documented in the medical record.

The suggested time period for data collection is a calendar month.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Number of children in the medical group's practice* reaching the age of 2 years within the reporting month

*"In the medical group's practice" is defined as a child who has been seen two or more times by the medical group (including office visits and urgent care) by his/her second birthday. At least one visit should be after the child reaches 15 months of age.

Exclusions

Unspecified

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Encounter
Patient Characteristic

DENOMINATOR TIME WINDOW

Time window is a single point in time

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Number of children in the denominator who are on time with their primary series of immunizations:

- DtaP -- Diphtheria, tetanus toxoids and acellular pertussis vaccine
- IPV -- Inactivated poliovirus
- MMR/MMRV -- Measles, mumps, rubella and varicella
- PCV7/PPV23 -- Pneumococcal
- VZV -- Varicella vaccine
- Hib -- *Haemophilus influenza* type b conjugate vaccine
- Hep B -- Hepatitis B vaccine (schedule 1 and schedule 2)
- Hep A -- Hepatitis A vaccine
- Rota -- Rotavirus vaccine
- Influenza vaccine

Note: Dosing schedule is subject to change, depending on manufacturer's recommendations. Refer to the Immunization table and corresponding annotations in the original measure documentation for specific administration criteria.

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Percentage of two-year-old patients who are on time with their primary series of immunizations.

- DtaP -- Diphtheria, tetanus toxoids and acellular pertussis vaccine
- IPV -- Inactivated poliovirus
- MMR/MMRV -- Measles, mumps, rubella and varicella
- PCV7/PPV23 -- Pneumococcal
- VZV -- Varicella vaccine
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- Rota -- Rotavirus vaccine
- Influenza vaccine

MEASURE COLLECTION

[Immunizations Measures](#)

DEVELOPER

Institute for Clinical Systems Improvement

FUNDING SOURCE(S)

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COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Work Group Members: James Nordin, MD (Work Group Leader) (HealthPartners Medical Group) (Pediatrics); Emma Carlin, MD (Park Nicollet Health Services) (Family Medicine); Barbara Yawn, MD (Olmsted Medical Center) (Family Medicine); Abinash Virk, MD (Mayo Clinic) (Infectious Disease); Barb Ottis, RN (Park Nicollet Health Services) (Nursing); Renner Anderson, MD (Park Nicollet Health Services) (Pediatrics); Robert Jacobson, MD (Mayo Clinic) (Pediatrics); Sarah Rall, PharmD (Marshfield Clinic) (Pharmacy); Penny Fredrickson (Institute for Clinical Systems Improvement) (Measurement/Implementation Advisor); Melissa Marshall, MBA (Institute for Clinical Systems Improvement) (Facilitator)

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

ICSI has adopted a policy of transparency, disclosing potential conflict and competing interests of all individuals who participate in the development, revision and approval of ICSI documents (guidelines, order sets and protocols). This applies to all work groups (guidelines, order sets and protocols) and committees (Committee on Evidence-Based Practice, Cardiovascular Steering Committee, Women's Health Steering Committee, Preventive & Health Maintenance Steering Committee and Respiratory Steering Committee).

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Dr. Robert Jacobson serves on the data safety monitoring board for Kaiser Permanente of Southern California overseeing a Gardasil trial. He receives less than \$10,000 for this commitment.

Barbara Ottis, RN holds stock in Merck and Baxter. She also received speaker fees from GSK in an amount less than \$10,000.

Dr. Barbara Yawn negotiated research funds on behalf of Olmsted Medical Center from Merck. Dr. Yawn receives less than \$10,000 from Merck for serving on the advisory board for Zostavax.

No other work group members have potential conflicts of interest to disclose.

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2003 Jul

REVISION DATE

2008 Oct

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Immunizations. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2007 Oct. 67 p.

SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Immunizations. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2008 Oct. 64 p. [67 references]

MEASURE AVAILABILITY

The individual measure, "Percentage of Two-year-old Patients Who Are on Time with Their Primary Series of Immunizations (DTaP, IPV, MMR/MMRV, PCV7/PPV23, VZV, Hib, Hep B, Hep A, Rota, Influenza)," is published in "Health Care Guideline: Immunizations." This document is available from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#).

For more information, contact ICSI at, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; phone: 952-814-7060; fax: 952-858-9675; Web site: www.icsi.org; e-mail: icsi.info@icsi.org.

NQMC STATUS

This NQMC summary was completed by ECRI on April 19, 2004. This NQMC summary was updated by ECRI Institute on October 11, 2004, August 11, 2005, July 17, 2006, December 26, 2007, and again on November 26, 2008.

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